

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
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J.W.

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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08/879, 322 06/20/97 HODGSON

A 14136

LM31/1124

EXAMINER

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DASTOURI, M

| ART UNIT | PAPER NUMBER |
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2723

DATE MAILED:

11/24/99

Please find below and/or attached an Office communication concerning this application or proceeding.**Commissioner of Patents and Trademarks**

Office Action Summary

Application No.

08/879,322

Applicant(s)

Hodgson et al

Examiner

Mehrdad Dastouri

Group Art Unit

2723



Responsive to communication(s) filed on Oct 19, 1999

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire Three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

Claim(s) 1-10 and 12 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

Claim(s) _____ is/are allowed.

Claim(s) 1-10 and 12 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

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DETAILED ACTION

Response to Amendment

1. Applicant's appeal brief filed, October 18, 1999, has been entered and made of record.

Reopening of Prosecution - New Ground of rejection

2. In view of the appeal brief filed on October 18, 1999, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

file or reply under 37 CFR 1.111; or,

request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

3. Applicants' arguments with regards to Claims 1-10 and 12 have been fully considered but they are deemed to be moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1, 3 and 12 are rejected under 35 US.C. 102(e) as being anticipated by Queisser et al (U.S. 5,818,953).

Regarding Claim 1, Queisser et al disclose an apparatus for measurement of the fruit particles in a matrix comprising:

a substantially opaque cabinet (Figure 1; Column 3, Lines 61-67, Column 4, Lines 1-9); a camera in the upper portion of said cabinet (Figure 1; Column 4, Lines 14-16; Column 4, Lines 22-26); a light source in said cabinet (Figure 1; Column 4, Lines 21-22); a sample tray (Figure 1; Column 4, Lines 10-12; Column 5, Lines 34-41. Sample tray contains a matrix (or a two-dimensional array) of food products.); and a computer with image analyzing software (Figure 2; Column 4, Lines 27-67, Column 5, Lines 1-11).

Regarding Claim 3, Queisser et al further disclose an apparatus for measurement of the fruit particles in a matrix wherein the light source comprises an incident light source within the cabinet ((Figure 1; Column 4, Lines 21-22).

With regards to Claim 12, arguments analogous to those presented for Claim 1 are applicable to Claim 12. Queisser et al further disclose illuminating the food particles so that an image may be obtained in which food particles are distinguishable from the background (Column 5, Lines 50-65); capturing a computer-readable image of at least a portion of said illuminating fruit particles; and using a computer and an image analyzing software program to analyze said

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image and obtain information concerning said fruit particles (Figures 2, 3, 6, 9 and 11; Column 13, Lines 4-60, Column 14, Lines 1-8).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable by Queisser et al (U.S. 5,818,953).

Regarding Claim 4, Queisser et al do not specifically disclose the apparatus of Claim 1 wherein the light source comprises switches for adjusting the intensity of the light. Light sources are inherently incorporated with switches for turning the lights on and off. Alternatively, utilizing switches for adjusting the intensity of a light in a predetermined range is extremely well known in the art (Official Notice.). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide an apparatus for measurement of the fruit particles in a matrix wherein the light source comprises switches for adjusting the intensity of the light because it will provide the capability of obtaining different images of samples under various illumination conditions for enhancing image quality.

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Regarding Claim 5, Queisser et al disclose the apparatus of Claim 1 wherein the light source comprises multiple light-producing sources (Figure 1; Column 5, Lines 52-57). Queisser et al do not explicitly disclose the apparatus of Claim 1 comprising independently-adjustable light-producing sources. Light sources are inherently incorporated with switches for turning the lights on and off. Alternatively, utilizing switches for adjusting the intensity of lights in a predetermined range is extremely well known in the art (Official Notice.). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide an apparatus for measurement of the fruit particles in a matrix wherein the light source comprises switches for adjusting the intensity of the light because it will provide the capability of obtaining different images of samples under various illumination conditions for enhancing image quality.

Regarding Claim 6, Queisser et al do not disclose the apparatus of Claim 1 wherein the inside of the cabinet is non-reflecting. Characteristics of the inside surface of a cabinet is the decision based upon designer's preference. Appropriate painting of the inside of a cabinet will result in a non-reflecting surface routinely practiced in the art (Official Notice). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a cabinet with non-reflecting inside surface because it will minimize light scattering inside the cabinet and will prevent degrading of the image quality due to light scattering.

8. Claims 2, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable by Queisser et al (U.S. 5,818,953) in view of Bolle et al (U.S. 5,546,475).

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Regarding Claim 2, Queisser et al do not disclose the apparatus of Claim 1 wherein said light source comprises a light box in the lower portion of said cabinet. Bolle et al disclose a produce recognition system wherein the light source comprises a light box in the lower portion of the cabinet (Figure 4; Column 9, Lines 21-50). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a light box in the lower portion of the cabinet to enclose the lighting fixtures because it will protect the lights against undesirable environmental conditions and mechanical damages.

Regarding Claim 7, Queisser et al do not disclose the apparatus of Claim 1 wherein the sample tray comprises a light-transmitting bottom. Bolle et al disclose a sample tray comprising light transmitting bottom (FIG. 4; Column 9, Lines 44-46). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a light transmitting (transparent) tray for supporting fruit particles in a matrix because it will provide adequate illumination for obtaining the image of the fruit particles.

Regarding Claim 8, neither Queisser et al nor Bolle et al disclose the apparatus of Claim 2 wherein said apparatus further comprises a light box cover. Configuration of the internal parts of the cabinets is based upon the discretion of the designer. The cover for an internal component such as a light box is considered one of the basic elements in construction of the cabinets (Official Notice). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a cabinet with cover for the light box because it will enclose components with distinct functions in separate segments.

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Regarding Claim 9, Queisser et al further disclose an apparatus for measurement of the fruit particles in a matrix wherein the apparatus further comprises a sample tray guide (Figure 1; Column 4, Lines 10-14; Column 5, Lines 24-28).

With regards to Claim 10, arguments analogous to those presented for Claims 1, 4, 6 and 7 are applicable to Claim 10.

Other prior art cited

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 4,875,254 to Rudy et al is cited for a method and apparatus for automatically cutting food products to predetermined weight or shape.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (703) 305-2438.

The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au, can be reached at (703)308-6604.

Any response to this action should be mailed to:

Assistant Commissioner for Patents

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Washington, D.C. 20231

or faxed to:

(703) 308-9051, or (703) 308-9052 (for *formal* communications; please mark
"EXPEDITED PROCEDURE")

or:

(703) 306-5406 (for *informal* or *draft* communications, please label
"PROPOSED" or "DRAFT")

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to
the Group Receptionist whose telephone number is (703)305-3900.

MD
Mehrdad Dastouri
Patent Examiner
Group Art Unit 2723
November 13, 1999

A. Au
Amelia Au
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